035 Salt Lake County
Gen Corr
cc: Leslie
Luci
Louis
Wayne Hedberg

State of Utah
GARY R. HERBERT
Governor

GREG BELL
Lieutenant Governor

Department of
Environmental Quality

Amanda Smith
Executive Director

DIVISION OF WATER QUALITY
Walter L. Baker, P.E.
Director

August 11, 2011

Mr. Evan Johnson
327 North 200 East
American Fork, UT 84003

Dear Mr. Johnson:

Subject: UPDES Reconnaissance/Storm Water Inspection Cardiff Fork Site, Big Cottonwood Canyon

Attached are the results of the Joint UPDES Reconnaissance/Storm Water Inspections conducted at your site located near Cardiff Fork in Big Cottonwood Canyon. This site is Unpermitted.

If you have any questions or comments, please contact me at (801) 536-4394 or by e-mail at LSHULL@utah.gov.

Sincerely,

Lonnie Shull, Environmental Scientist
UPDES IES Section

Enclosures

Lns:lns

cc: Cyle Buxton, Buxton Company, w/encl.
Stephanie Geick, EPA Region 8, w/encl.
Royal DeLegge, Salt Lake Valley Health Department w/encl.
Jason Gibson, US Army Corps of Engineers w/encl.
Ying-Ying Macauley, UT DDQ, w/encl
Leslie Heppler, UT DOGM, w/encl

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JOINT UPDES RECONNAISSANCE/STORM WATER INSPECTION
BUXTON COMPANY
CARDIFF FORK SITE, BIG COTTONWOOD CANYON
UMPERMITTED SITE
AUGUST 8, 2011

FACILITY CONTACT AND ADDRESS:

Mr. Evan Johnson
327 North 200 East
American Fork, UT 84003
(801) 369-3400

Cyle Buxton, Agent
3091 East 7180 South
Cottonwood Heights, UT 84121

DESCRIPTION OF FACILITY:

The site is a construction site located approximately 8 miles up Big Cottonwood Canyon near Cardiff Fork. The purpose of the project is to install a box culvert over Big Cottonwood Creek, and repair and replace the seal over several abandoned mines. The area of disturbance was estimated to be 0.6 acres. The site does not have a permit.

RECEIVING WATERS AND STREAM CLASSIFICATION:

The site borders Big Cottonwood Creek. According to *Utah Administrative Code* (*UAC*) *R317-2-13*, Big Cottonwood Creek is listed as: Class 1C, 2B, 3A.

Class 1C- Protected for domestic purposes with prior treatment by treatment processes as required by the Utah Division of Drinking Water;

Class 2B- Protected for infrequent primary contact recreation, also protected for secondary contact recreation where there is a low likelihood of ingestion of water or a low degree of bodily contact with the water. Examples include, but are not limited to, wading, hunting, and fishing; and

Class 3A- Protected for cold water species of game fish and other cold water aquatic life, including the necessary aquatic organisms in their food chain.

BACKGROUND:

On the afternoon of Monday August 8, 2011, the Utah Division of Water Quality received an e-mail from Florence Reynolds from Salt Lake City Public Utilities. The report was of an unpermitted mining operation in the Cardiff Fork area of Big Cottonwood Canyon. I called Ms.

Reynolds to obtain more information about the operation. Ms. Reynolds informed me that the project had been permitted thru Salt Lake County flood control program, as they had to install a box culvert. As part of this installation, there had been two turbidity/TSS spike at the Big Cottonwood Drinking Water Plant at the mouth of the canyon. She gave me the name of Chris Springer, who had worked to permit the project with Salt Lake County Flood Control.

I called Mr. Springer and he gave me the history of the project from the point of view of County Flood Control. Part of the project was the installation of a box culvert over Big Cottonwood Creek. He informed me that the project also had a stream alteration permit from the Department of Natural Resources. We agreed that the site warranted a site visit, and agreed to meet at Big Cottonwood Canyon.

FINDINGS:

I met Chris Springer with Salt Lake County Flood Control at the mouth of Big Cottonwood Canyon. We exchanged information and drove to the site. We arrived at the site at approximately 4:30 pm. Upon our arrival onsite, we found an unlocked gate at the entrance to the site. We parked the vehicle in the state right of way and walked down the road to the location of the newly installed box culvert. It appeared that the access road had been newly graded as there was disturbance to the soil and vegetation. Upon our arrival at the site, there was a track hoe and a front end loader doing excavation and earth moving work. We did not engage these employees.

Mr. Springer and I observed the box culvert installation. While onsite we met with Greg Baptist a grading review specialist and registered storm water inspector with Salt Lake County's Planning and Development Services Division. Mr. Baptist was onsite overseeing the grading and earth moving activities and informed us of the location of the mine portals. We exchanged information and Mr. Springer and I walked down the newly constructed mine access road to the locations of the portals.

We found what looked like three mine portals. It had been reported to the Division of Water Quality that these portals had been opened as part of the construction and grading activities. We observed two portals that were partially covered and one portal that was open. The open portal had a flow of water coming from it's entrance. It was estimated that the flow from the portal was less than 1 Cubic feet per second (CFS). This water was moving by sheet flow across the newly excavated road in close proximity to Big Cottonwood Creek where it was infiltrating the ground. Given the proximity to the creek it was un-doubtfully flowing into Big Cottonwood Creek. There was no evidence of active mining at the site.

The Clean Water act defines a point source as "any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural storm water discharges and return flows from irrigated agriculture." Given this definition, the Utah Division of Water Quality has permitted several abandoned mines across the state for the discharge of excess water the leaves the mines. A couple of example of this situation are Jordanelle SSD (UT0020915) and Park City Municipal, Spiro Tunnel (UT0025461). It appeared that this was an unpermitted discharge.

We returned to our vehicle. I took a GPS measurement of the newly disturbed road and found that it was approximately 0.25 miles in length. The estimated width of the road was 15-20 feet. Based on these figures, the estimated area of disturbance was approximately 26,400 sq feet (0.6 acres). This is less than the 1 acre requirement for the General Permit for Construction Storm Water Activities (*UTR300000*).

We departed the site at approximately 5:00 pm.

When I arrived at the Divison of Water Quality offices on August 9, 2011, I contacted Evan Johnson and Cyle Buxton. Mr. Johnson is the owner of the property and Mr. Buxton is Mr. Johnson's agent. I left voicemails for both. Mr. Buxton called me back first and we talked about the nature of the activity. According to Mr. Buxton, there had been a previous bridge with culverts over Big Cottonwood creek which vandals had damaged and removed. The mine portals had also been opened by trespassers on the property. The portals had previously been sealed, and had been reopened by people who apparently wanted to enter the old abandoned mines. The purpose of the construction project is to reseal the mines with concrete and put a metal gate over them. I informed Mr. Buxton that the discharge from the mine portals could be considered a point source discharge and could potentially be regulated under the UPDES program. I also informed him that if the mine portals are sealed, then no permit would be required.

I also received a call back from Mr. Johnson. Our conversation mirrored the conversation with Mr. Buxton. Mr. Johnson told me they were trying to seal the mine portals. I outlined the areas where there could be permitting and compliance issues with our office.

I also talked with Mr. Johnson and Mr. Buxton about the possibility of obtaining the General Permit for Construction Storm Water Activities (*UTR300000*). At the time, I told them that this inspection report was going to require that they obtain the Construction Storm Water Permit. However, in further conversations between the other two parties and Harry Campbell, Utah DWQ's Construction Storm Water Program Coordinator, Mr. Campbell felt that until the site is shown to be out of compliance, that no construction storm water permit coverage would be required at this time. However, if site conditions change significantly, or if the site is found to be discharging significant amounts of polluted storm water due to the construction activities then the Division of Water Quality could Designate the site under UAC R-317-8-3.9(1)(a)5.

DEFICIENCIES
1). None.

CORRECTIVE ACTION
1). None.

REQUIREMENTS:
1). None.

RECOMMENDATIONS:

1. The mine portals should be sealed as soon as possible. Any discharge of water from these historic mines could be subject to future UPDES permitting.
2. Maintain the erosion control best management practices on the site. While the site is not being required to obtain coverage under the General Permit for Construction Storm Water Activities (*UTR300000*) at this time, the Utah Division of Water Quality reserves the right

to require future coverage under this permit if the site conditions deteriorate and there is significant risk of discharge of storm water pollutants.

Photos

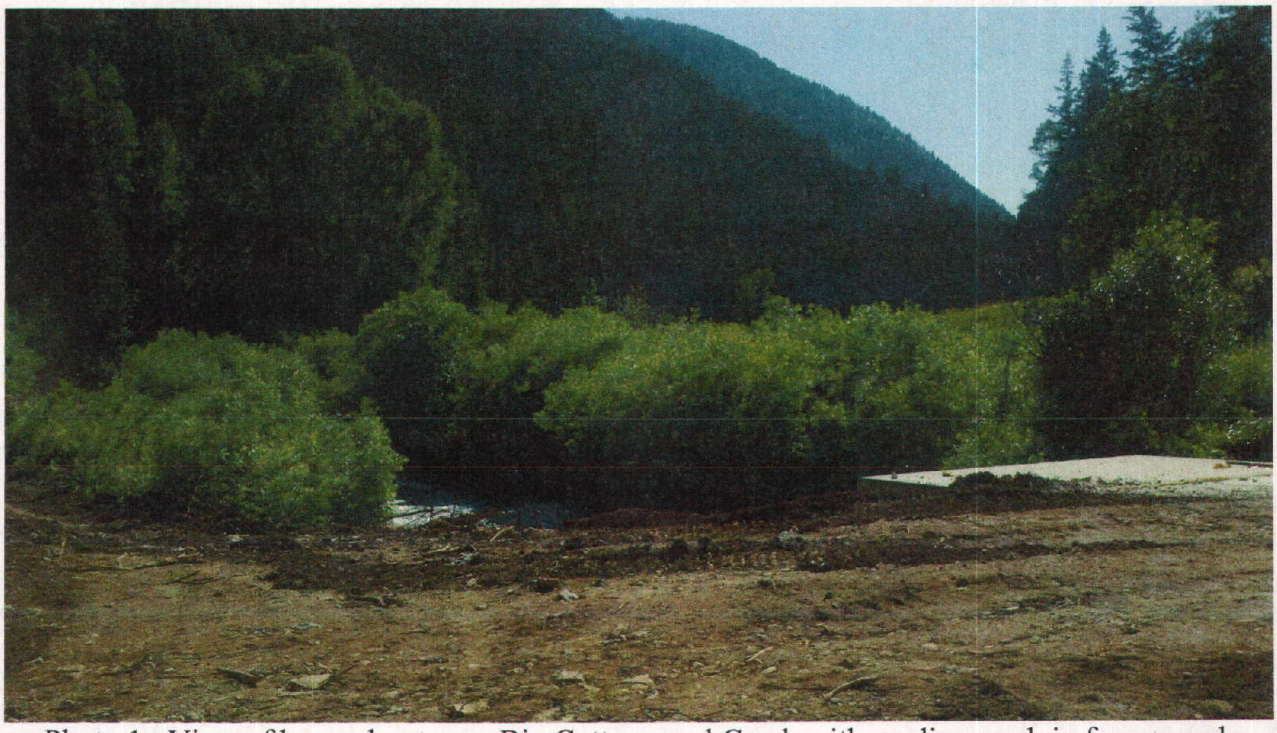

Photo 1. View of box culvert over Big Cottonwood Creek with grading work in foreground.

Photo 2. View of old mine portals with debris in front of them. The material in from of these portals looks to be recently deposited there.

Photo 3. Alternative view of same portal(s) seen in photo 2.

Photo 4. View of recently constructed access road to mine portals. View looking east.

Photo 5. View of recently constructed access road to mine portals. View looking west. Big Cottonwood Creek is to the right of the frame just behind the small willow trees.

Photo 6. View of entrance to the third mine portal with material removed from in front of the portal.

Photo 7. View of water coming from the mine portal infiltrating into the ground.

Photo 8. View of water coming from the mine portal infiltrating into the ground. Big Cottonwood Creek is to the right of the frame just behind the small willow trees.

Photo 9. View of water coming from the mine portal infiltrating into the ground.

Photo 10. View of water coming from the mine portal infiltrating into the ground.

Photo 11. View looking from mine portal towards Big Cottonwood Creek. The creek is just behind the willows. Big Cottonwood Canyon Road is in the upper part of the frame.

Photo 12. View of road into the site. This was an existing road, but was reworked in places for this project. Big Cottonwood Canyon Road is at the top of the slope on the right of the frame. Straw waddles were installed per instruction of Salt Lake County Planning and Development Services Division.

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding *(i.e., ICIS)*

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac. Type
N (1, 2)	UNPERMITE (3–11)	110808 (12–17)	R (18)	S (19)	2 (20)

Remarks (21–66)

Inspection Work Days	Facility Self-Monitoring Evaluation Rating	BI	QA	Reserved
020 (67–69)	3 (70)	N (71)	N (72)	(73, 74) (75–80)

Section B: Facility Data

Name and Location of Facility Inspected *(For industrial users discharging to POTW, also include POTW name and NPDES permit number)*

Cardiff Fork, Approx 8 miles up Big Cottonwood Canyon UT
Box Culvert instalation site and Mine Portal closure activity
Approx Coordinates
40°38'41.63"N
111°40'1.45"W

Entry Time/ Date	Permit Effective Date
4:30PM - 88/11	None
Exit Time/ Date	**Permit Expiration Date**
5:00 PM 8/8/11	None

Name(s) of On-Site Representative(s)/Title(s)/Phone and Fax Number(s)

Same as below

Other Facility Data *(e.g., SIC NAICS, and other descriptive information)*

SIC Code: Major Group 16, Heavy construction other than building construction.

Name, Address of Responsible Official/Title/Phone and Fax Number

Mr. Evan Johnson
327 North 200 East
American Fork, UT 84003
(801) 369-3400

Contacted

☒ Yes ☐ No

Section C: Areas Evaluated During Inspection *(Check only those areas evaluated)*

☒ Permit	☐ Self Monitoring Program	☐ Pretreatment	☐ MS4
☐ Records/Reports	☐ Compliance Schedule	☐ Pollution Prevention	
☒ Facility Site Review	☐ Laboratory	☒ Storm Water	
☒ Effluent/Receiving Waters	☐ Operations & Maintenance	☐ Combined Sewer Overflow	
☐ Flow Measurement	☐ Sludge Handling/Disposal	☐ Sanitary Sewer Overflow	

Section D: Summary of Findings/Comments

(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

SEV Codes	SEV Description

Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Number(s)	Date:
Lonnie Shull, Environmental Scientist Lonnie M Shull III	Utah Division of Water Quality (801) 536-4394	8/11/2011
Name and Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Number(s)	Date:
Jeff Studenka, Manager UDES IES Section Jeff Studenka	Utah Division of Water Quality (801) 536-4395	8-15-11

United States Environmental Protection Agency
Washington, D.C. 20460

Water Compliance Inspection Report

Section A: National Data System Coding *(i.e., ICIS)*

Transaction Code	NPDES	yr/mo/day	Inspection Type	Inspector	Fac. Type
N (1, 2)	UNPERMITE (3–11)	110806 (12–17)	~ (18)	S (19)	2 (20)

Remarks (21–66)

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Mr. Evan Johnson
327 North 200 East
American Fork, UT 84003
(801) 369-3400

Contacted

☒ Yes ☐ No

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(Attach additional sheets of narrative and checklists, including Single Event Violation codes, as necessary)

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Name(s) and Signature(s) of Inspector(s)	Agency/Office/Phone and Fax Number(s)	Date:
Lonnie Shull, Environmental Scientist Lonnie M Shull III	Utah Division of Water Quality (801) 536-4394	8/11/2011

Name and Signature of Management Q A Reviewer	Agency/Office/Phone and Fax Number(s)	Date:
Jeff Studenka, Manager UDES IES Section Jeff Studenka	Utah Division of Water Quality (801) 536-4395	8-15-11